SERFF Tracking #: *AMLC-132154836*   **State Tracking #:**   **Company Tracking #:** *GWLROP2I RATES*

State: *District of Columbia*   **Filing Company:**   *Globe Life And Accident Insurance Company*
TOI/Sub-TOI: *L07I Individual Life - Whole/L07I.101 Fixed/Indeterminate Premium - Single Life*
Product Name: *GWLROP2I Rates*
Project Name/Number: */*

Filing at a Glance

Company:	Globe Life And Accident Insurance Company
Product Name:	GWLROP2I Rates
State:	District of Columbia
TOI:	L07I Individual Life - Whole
Sub-TOI:	L07I.101 Fixed/Indeterminate Premium - Single Life
Filing Type:	Rate
Date Submitted:	11/15/2019
SERFF Tr Num:	AMLC-132154836
SERFF Status:	Submitted to State
State Tr Num:	
State Status:	
Co Tr Num:	GWLROP2I RATES
Implementation Date Requested:	
Author(s):	David Mather
Reviewer(s):	
Disposition Date:	
Disposition Status:	
Implementation Date:	

General Information

Project Name:	Status of Filing in Domicile: Not Filed
Project Number:	Date Approved in Domicile:
Requested Filing Mode: Review & Approval	Domicile Status Comments: Rate Filing not required in Nebraska
Explanation for Combination/Other:	Market Type: Individual
Submission Type: New Submission	Individual Market Type:
Overall Rate Impact:	Filing Status Changed: 11/15/2019
	State Status Changed:
Deemer Date:	Created By: David Mather
Submitted By: David Mather	Corresponding Filing Tracking Number:

Filing Description:
NAIC: 290-91472
FEIN: 63-0782739
RE: GWLROP2I Rate Filing

Attached for your review and approval is a copy of the above mentioned rates for form GWLROP2I. GWLROP2I was filed and approved by your department on 9/25/2018 under AMLC-131601958.

Premium rate schedule and other supporting documentation are provided, as required.

We are looking forward to your expedient review and approval of this form. If you have any questions or concerns, please feel free to contact me at (214) 250-5174, or by e-mail at drmather@Globe.Life.

Sincerely,

David R Mather
Team Lead, Product Compliance

Company and Contact

Filing Contact Information
David Mather, Compliance Lead Analyst   drmather@Globe.Life
3700 S. Stonebridge Drive   214-250-5174 [Phone]
McKinney, TX 75070

Filing Company Information
Globe Life And Accident Insurance Company	CoCode: 91472	State of Domicile: Nebraska
P.O. Box 8080	Group Code: 290	Company Type: Life and Health
McKinney, TX 75070	Group Name: Liberty National	
(800) 801-6831 ext. [Phone]	FEIN Number: 63-0782739	State ID Number:

Filing Fees

Fee Required?   No

Retaliatory?   No

Fee Explanation:

Rate Information

Rate data does NOT apply to filing.

Rate/Rule Schedule

Item No.	Schedule Item Status	Document Name	Affected Form Numbers (Separated with commas)	Rate Action	Rate Action Information	Attachments
1		Premium Rates	GWLROP2I	New		DC - GWLROP2I prem rates.xls,

SERFF Tracking #:	AMLC-132154836	**State Tracking #:**	**Company Tracking #:** GWLROP2I RATES

State:	District of Columbia	**Filing Company:** Globe Life And Accident Insurance Company
TOI/Sub-TOI:	L07I Individual Life - Whole/L07I.101 Fixed/Indeterminate Premium - Single Life	
Product Name:	GWLROP2I Rates	
Project Name/Number:	/	

Attachment DC - GWLROP2I prem rates.xls is not a PDF document and cannot be reproduced here.

Supporting Document Schedules

Satisfied - Item:	Actuarial Justification
Comments:	
Attachment(s):	GWLROP2I (DAY,DAZ) ActMemo.pdf
Item Status:	
Status Date:	

Globe Life and Accident Insurance Company

Oklahoma City, Oklahoma

Actuarial Memorandum

Whole Life with Limited Benefits

Policy Form : GWLROP2I

TYPE :
Guarantee Issue nonparticipating whole life insurance

BENEFITS :
Death benefit during the limited benefit period is a return of premium. Interest may be added to the return of premium death benefit.
Following the limited benefit period, the full level death benefit will be available for the life of the insured.

During the limited benefit period, an accidental death benefit is available.
Benefits are reasonable in relation to the premium charged. The minimum full level death benefit issue amount is $1,000.

PREMIUMS :
Premiums payable during the pay period. An introductory offer may be offered.

ISSUE AGE RANGE :
45-80 (premiums may be developed in the future to expand the issue age range)

BASIS OF NONFORFEITURE VALUES

Mortality:	2001 CSO - age last birthday - ultimate - sex-distinct - composite smoker-nonsmoker
	If subject to the Norris decision, or Title VII of the Civil Rights Act of 1964, or if
	unisex Gross Premiums are offered, an appropriate unisex-blended 2001 CSO-ALB
	may be used for nonforfeiture values
	Curtate
	Per the currently adopted NAIC Valuation Manual,...
	"The minimum nonforfeiture standard values for GI life insurance policies issued before Jan. 1, 2020,
	shall be determined using the ultimate form of the 2001 CSO Table."
	"The minimum nonforfeiture standard values for GI life insurance policies issued after Dec. 31, 2019,
	shall be determined using ultimate form of the 2001 CSO Table."
Interest Rate:	4.50%
Cash Values:	Equal to or greater than the minimum required by the Standard Nonforfeiture Law.
	Cash values per unit are rounded to high cent.
Reduced Paid-Up:	Level for life, rounded to high dollar
Extended Term Insurance:	Level for full death benefit, term period rounded to at least high day

BASIS OF MINIMUM RESERVE REQUIREMENTS:
Valuation basis will meet the current requirements of the valuation law.
The Basis of Reserves may be adjusted for future new business if required or allowed by prevailing valuation laws.

CHARGES:
Initial acquisition expense charges, expense charges, surrender charges and cost of insurance (COI) charges are not applicable.
This is a traditional nonparticipating life insurance product. This is not a universal life and not an interest sensitive product.

ILLUSTRATIONS:
This form will not be marketed with illustrations.
This form does not have indeterminate premiums.

A. General Formulas (Per Unit Basis, 1 Unit = $1,000)

Definitions

GP_x — the lowest level annual gross premium per unit in any premium band for issue age x
(chosen to produce the highest cash values per unit, since the cash values per unit are the same regardless of face amount)

GMP_x — monthly gross premium per unit $= GP_x$ * Monthly Modal Factor (or $1 if monthly premium of intro period)
(chosen to produce the highest cash values, since this produces the lowest adjusted premium)

$b =$ age benefit period ends = 121
$p =$ age premium period ends = 121
$i =$ interest rate applied to the return of premium

$DB_{[x]+t} =$ Death Benefit per unit for issue age x and at beginning of policy year t

$= GMP_x * (1+i)^{(1/12)}$ for t=1

$= GMP_x * (1+i)^{(13/12)} + GP_x * (1+i)$ for t=2

$= 1,000$ for t>=3

$_tPVBEN'_{x:\overline{b-x-t}|} =$ Present Value of Future Benefits for issue age x at duration t
(curtate basis, used for nonforfeiture calculations)

$$= \left(\sum_{k=t}^{b-x-1} DB_{k+1} * C_{x+k} \right) / D_{x+t}$$

$GPR_k =$ Gross Premium Ratio in Policy Year k+1 = (Gross Prem in Pol Yr k+1) / (Gross Prem in Pol Yr 1)

k= 0, 1, 2, 3, ..., b-x-1
For products with level premiums, $GPR_k=1$ for all k

$\ddot{a}''_{x+t:\overline{p-x-t}|} =$ Present Value of the future gross premium ratios at duration t for issue age x (curtate basis)

$$\sum_{k=0}^{p-x-t-1} (GPR_k) \, v^k \, {}_kp_{x+t}$$; where GPR_k is the Gross Premium Ratio in Policy Year k+1

For products with level premiums payable for life, $\ddot{a}''_{x+t:\overline{p-x-t}|} = \ddot{a}_{x+t}$

B. Nonforfeiture Values

1.) Cash Values per Unit

$_{p-x}P'^{NLP}_{x:\overline{b-x}|} =$ Nonforfeiture Net Level Premium $= {}_0PVBEN'_{x:\overline{b-x}|} / \ddot{a}_{x:\overline{p-x}|} = P_x^{NLP} = {}_0PVBEN_x / \ddot{a}_x$

$AAI =$ $\left(\sum_{t=1}^{Min[10,b-x]} DB_t \right) / (Min[10,b-x])$ = Average Amount of Insurance

$_{p-x}P'^{A}_{x:\overline{b-x}|} =$ Nonforfeiture Factor $= P_x^A$

$= ({}_0PVBEN'_{x:\overline{b-x}|} + .01AAI + 1.25 * Min[P_x^{NLP}, .04AAI]) / \ddot{a}''_{x:\overline{p-x}|}$

$= ({}_0PVBEN_x + .01AAI + 1.25 * Min[P_x^{NLP}, .04AAI]) / \ddot{a}_x$

$_tCV_x =$ $Max[{}_tPVBEN'_{x:\overline{b-x}|} - P_x^A * \ddot{a}''_{x+t:\overline{p-x-t}|}, 0]$

$= Max[{}_tPVBEN'_{x:\overline{b-x}|} - P_x^A * \ddot{a}_{x+t}, 0]$, round high cent

2.) Reduced Paid Up Insurance

$_tPU_x =$ $_tCV_x / A'_{x+t:\overline{b-x-t}|}$ $= {}_tCV_x / A_{x+t}$ rounded to high dollar

3.) Extended Term Insurance

Years = y = Largest integer for which $1000 * A'_{x+t:\overline{y}|} <= {}_tCV_x$

Days = d = $365 * ({}_tCV_x - 1000A'_{x+t:\overline{y}|}) / (1000*A'_{x+t:\overline{y+1}|} - 1000*A'_{x+t:\overline{y}|})$,
d is rounded to the next highest integer

If policy uses months (instead of days) for ETI, ETI Month calculation:
Months = m = $12 * ({}_tCV_x - 1000*A'_{x+t:\overline{y}|}) / (1000*A'_{x+t:\overline{y+1}|} - 1000*A'_{x+t:\overline{y}|})$,
m is rounded to the next highest integer

C. Sample Calculation (at end of year 20)

Male Issue Age 45

$1,000 Coverage per Unit (full face amount); Return of Premium for a 2 year limited benefit period at 7.00%

2001 CSO-Male-ALB at 4.50%

Definitions

$GP_{45} =$ 43.52

$GMP_{45} =$ 1.00

$b =$ 121

$p =$ 121

$i =$ 0.07

$DB_{[x]+t} =$

$= GMP_{45} * (1+i)^{(1/12)} = 1.00 * (1.07)^{(1/12)} = 1.005654$ for t=1

$= GMP_{45}*(1+i)^{(13/12)}+GP_{45}*(1+i) = 1.00*(1.07)^{(13/12)}+43.52*(1.07) = 47.64245$ for t=2

$= 1,000$ for t>=3

Cash Values per Unit

$_{121-45}P'_{45:\overline{121-45}|}{}^{NLP} =$ Nonforfeiture Net Level Premium $= {}_0PVBEN'_{45:\overline{121-45}|} / \ddot{a}_{45:\overline{121-45}|} = P_{45}{}^{NLP}$

$= {}_0PVBEN_{45} / \ddot{a}_{45}$ $= 253.819946 / 17.205271 = 14.752453$

$AAI =$ Average Amount of Insurance $= (1.005654 + 47.64245 + (8)(1000)) / 10 = 804.8648$

$_{121-45}P'_{45:\overline{121-45}|}{}^{A} =$ Nonforfeiture Factor $= P_{45}{}^{A}$

$= ({}_0PVBEN_{45} + .01AAI + 1.25 * Min[P_{45}{}^{NLP}, .04AAI]) / \ddot{a}_{45}$

$= (253.819946 + 8.048648 + 1.25 * Min[14.752453, 32.1946]) / 17.205271 = 16.29205$

$_{20}CV_{45} =$ $Max [{}_{20}PVBEN'_{45:\overline{121-45}|} - P_{45}{}^{A} * \ddot{a}''_{45+20:\overline{121-45-20}|} , 0]$

$= Max [{}_{20}PVBEN'_{45} - P_{45}{}^{A} * \ddot{a}_{65}, 0]$

$= Max [505.7999 - (16.29205)(11.47642), 0] = 318.8255$ round near high ==> 318.83

2.) Reduced Paid Up Insurance

$_{20}PU_{45} =$ $_{20}CV_{45} / A'_{45+20:\overline{121-45-20}|}$ $= {}_{20}CV_{45} / A_{65} = 318.83 / .5057999 = 630.348$

rounded to high dollar ==> 631.00

3.) Extended Term Insurance

Years = y = Largest integer for which $1000 * A'_{45+20:\overline{y}|} <= {}_{45}CV_{20}$

$1000 A'_{65:\overline{16}|} = 311.3759 <= {}_{20}CV_{45} = 318.83 <= 1000 A'_{65:\overline{17}|} = 332.0451$

y = 16 years
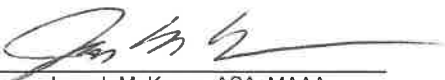
Days = d = $365 * ({}_{20}CV_{45} - 1000A'_{65:\overline{16}|}) / (1000*A'_{65:\overline{17}|} - 1000*A'_{65:\overline{16}|})$,

$= 365 (318.83 - 311.3759) / (332.0451 - 311.3759) = 131.6329$

d is rounded to the next highest integer ===>   d = 132 days

I have read the form and supporting material submitted with this filing.

I hereby certify, to the best of the undersigned's knowledge and belief, this filing is in compliance with the applicable laws and regulations of this state, including the nonforfeiture values and reserves developed herein equal or exceed the minimum requirements for the standard nonforfeiture (Standard Nonforfeiture Law for Life Insurance, Model 808), including the consistent progress of cash surrender values ("smoothness test"), valuation laws, appropriate actuarial guidelines, and IRS Section 7702/7702A.

No assumptions or provisions unfairly discriminate in availability, rates, benefits, or any other way for individuals of the same class, equal expectation of life, and degree of risk or hazard. The use of variability in this form is administered in a uniform and non-discriminatory manner.

I am a member of the American Academy of Actuaries that meets its Qualification Standards to render this opinion, and employed by the Globe Life and Accident Insurance Company.

Joseph M. Kaner, ASA, MAAA
Associate Actuary, Life Forms & Rates

July 30, 2019
Date